



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,819	03/22/2004	Stephen Dodge Edwardsen	15-DS-00542-3 (13047US03)	1477
23446	7590	01/25/2006	EXAMINER	
MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			IMAM, ALI M	
			ART UNIT	PAPER NUMBER
			3737	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/805,819	Applicant(s) EDWARDSSEN ET AL.	
	Examiner Ali Imam	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 is/are allowed.
- 6) ☒ Claim(s) 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the applicant's amendment filed 10/31/2005, all necessary changes to the claims and specification have been entered.

Response to Arguments

2. Applicant's arguments filed 10/31/2005 have been fully considered but they are not persuasive. Applicant's core argument is that in regard to claims 15-21, Gruner, or Wary, or King, or Cooper, or Konstorum, or Oakley, or Ishiguro does not teach a rotating endoscope shaft. The examiner respectfully disagrees. Gruner teaches in Fig. 1 and cols 2-4, a transesophageal echocardiography probe (col. 2, line 43) for imaging internal structures (col. 2, line 56) comprising a rotating endoscope shaft (34) having an imaging element/transducer (30) and a rotation control (20, 22), a control handle (10), wherein the rotating endoscope shaft protrudes from the control handle. Gruner further teaches a brake mechanism (28, 28'), rotation control wheel (24, 26), a motor (160), a fixed drive shaft (122), and imaging controls (col. 7, line 64).

Alternatively, Wary teaches in Fig. 4 and cols 3-4, or King teaches in Fig. 1, or Cooper teaches in Fig. 1, or Konstorum teaches in Figs. 1 and 6, or Oakley teaches in Fig. 1, a transesophageal echocardiography probe for imaging internal structures comprising a rotating drive shaft having an imaging element and a rotation control, a control handle, a brake mechanism, rotation control wheel, a motor, a fixed drive shaft, and imaging controls.

Since the above references teach a rotation control for rotating the endoscope shaft, it is inherent that the rotation control is affixed to the rotating endoscope shaft.

Claim Rejections - 35 USC § 102/103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 15-21 are rejected under 35 U.S.C. 102(b) as anticipated by Gruner (US 5,634,466) or Wary (US 5,215,092) or King (US 5,388,584) or Cooper et al. (US 5,479,929), or Konstorum (US 5,738,631) or Oakley et al. (US 5,413,107). or, in the alternative, under 35 U.S.C. 103(a) as obvious over any of the references cited above in view of Ishiguro et al. (US 5,211,176).

Gruner teaches in Fig. 1 and cols 2-4, a transesophageal echocardiography probe (col. 2, line 43) for imaging internal structures (col. 2, line 56) comprising a rotating endoscope shaft (34) having an imaging element/transducer (30) and a rotation control (20, 22), a control handle (10), wherein the rotating endoscope shaft protrudes from the control handle. Gruner further teaches a brake mechanism (28, 28'), rotation control wheel (24, 26), a motor (160), a fixed drive shaft (122), and imaging controls (col. 7, line 64).

Alternatively, Wary teaches in Fig. 4 and cols 3-4, or King teaches in Fig. 1, or Cooper teaches in Fig. 1, or Konstorum teaches in Figs. 1 and 6, or Oakley teaches in Fig. 1, a transesophageal echocardiography probe for imaging internal structures comprising a rotating drive shaft having an imaging element and a rotation control, a control handle, a brake mechanism, rotation control wheel, a motor, a fixed drive shaft, and imaging controls.

Since the above references teach a rotation control for rotating the endoscope shaft, it is inherent that the rotation control is affixed to the rotating endoscope shaft.

Alternatively, Ishiguro teaches rotation control (79) affixed to a rotating endoscope shaft (see Fig. 6). Ishiguro further teaches that the rotation control element (79) is used to turn the ultrasound transducer (imaging element) accurately into a direction of interest (col. 10, lines 58-62).

Therefore, it would have been obvious to an ordinary skill in the art at the time the invention was made to modify Gruner or Wary or King or Cooper or Konstorum or Oakley such that the rotation control element is affixed to the rotating endoscope shaft so that the imaging element can be turned accurately into a direction of interest as per the teaching of Ishiguro.

All other limitations of the independent and dependent claims that are not explicitly mentioned above are considered taught alone, or in combination, by the references cited above.

Allowable Subject Matter

5. Claims 1-14 are allowed.
6. The following is an examiner's statement of reasons for allowance: none of the prior art, alone or in combination teaches or suggests the claimed driving cog wheel attached to the rotating endoscope shaft wherein the driving cog wheel operatively engaging the driven cog wheel to rotate the rotating endoscope shaft relative to the fixed endoscope shaft.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Imam whose telephone number is 571-272-4737. The examiner can normally be reached on Mon. - Th., 8:00- 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3737

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ali Imam
Primary Examiner
Art Unit 3737

AI
1/23/6